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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,937	10/30/2003	T-Chun Chen	252011-1750	1037

24504 7590 01/03/2007  
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EXAMINER

BUTLER, MICHAEL E

ART UNIT	PAPER NUMBER
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3653

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.-

10/696,937

Applicant(s)

CHEN ET AL.

Examiner

Michael Butler

Art Unit.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restriction*

1. Applicant's election of invention I without traverse on 10/18/06 of the restriction requirement of 9/20/06 is acknowledged and made final.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:  
A person shall be entitled to a patent unless --
  - (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
  - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States
  - (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
3. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Erjavic et al. 5355320 which discloses all the claimed elements including:

(Re: cl 1) A system of automated sorter operation for held or banked wafer lots, comprising: a storage device capable of storing a plurality of process records, each process record corresponding to a wafer lot and comprising an identity and a current status indicating if the wafer lot is on hold, in a production or in a non-production bank (c5 L 36-c6 L 9);

and a sorting module receiving a wafer lot identity, acquiring the current status corresponding to the wafer lot identity from the process record, issuing a first status setting instruction corresponding to the current status to a manufacturing execution system (MES) to release the wafer lot, issuing a flow instruction with sorting recipes directing the MES to perform a sorter operation, and issuing a second status setting instruction corresponding to the current status to the MES to hold or bank the wafer lot (c6 L 10-58)

(Re: cl 2) wherein the sorting module stores the current status into a temporary file or table, issues the second status setting instruction corresponding to the current status in the temporary file or table, and removes the temporary file or table after the sorter operation (c7 L 28-32)

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(Re: cl 3) wherein the wafer lot identity is input by an operator or a computer system (c6 L 10-58)

(Re: cl 5) further comprising a wafer sorter performing sorter operations according to sorting recipes (50 fig 2a )

(Re: cl 6)(5) further comprising a transport system transporting the wafer lot to the wafer sorter (c2 L 35-c3 L 16)

(Re: cl 7)(6) wherein the MES applies a tool dispatch rule to determine the wafer sorter starts the transport system and the wafer sorter to perform the sorter operation using automated instructions (c4 L 50-68)

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim(s) 1-8 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Erjavic et al. 5355320 in view of Chang et al. 6778879 wherein the former discloses the elements previously discussed and the latter discloses any elements not inherently taught by the former including:

(Re: cl 4) wherein the MES releases or holds/banks the wafer lot based on the first status setting instruction or the second status setting instruction respectively (c2 L 49-62; c9 L 51-c10 L 2)

(Re: cl 8) wherein the sorter operation is slot mapping, carrier exchange, wafer lot combination or splits (c6 L 4-26).

It would have been obvious for Erjavic et al. to release the wafer after status setting to a defective wafer lot if a defective status occurs as taught by Chang et al. and come up with the

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instant invention. It would have been obvious for Erjavic et al. to split lot the wafer so that different wafers may be processed in different operations as taught by Chang et al. and come up with the instant invention.

6. Claim(s) 1-8 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Erjavic et al. 5355320 in view of Conboy et al. 6392403 wherein the former discloses the elements previously discussed and the latter discloses any elements not inherently taught by the former including:

(Re: cl 4) wherein the MES releases or holds/banks the wafer lot based on the first status setting instruction or the second status setting instruction respectively (c3 L 45-c4 L 55)  
(Re: cl 8) wherein the sorter operation is slot mapping, carrier exchange, wafer lot combination or splits (c4 L 55-67).

It would have been obvious for Erjavic et al. to release the wafer after status setting to a defective wafer lot if a defective status occurs as taught by Conboy et al. and come up with the instant invention. It would have been obvious for Erjavic et al. to slot map the wafer to select the desired specializing wafer as taught by Conboy et al. and come up with the instant invention.

7. Claim(s) 1-8 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Erjavic et al. 5355320 in view of Beffa 7117063 wherein the former discloses the elements previously discussed and the latter discloses any elements not inherently taught by the former including:

(Re: cl 4) wherein the MES releases or holds/banks the wafer lot based on the first status setting instruction or the second status setting instruction respectively (5 L 39-46)  
(Re: cl 8) wherein the sorter operation is slot mapping, carrier exchange, wafer lot combination or splits (c6 L 55-67).

It would have been obvious for Erjavic et al. to release the wafer after status setting to a defective wafer lot if a defective status occurs as taught by Beffa and come up with the instant invention. It would have been obvious for Erjavic et al. to split lot the wafer so that different

wafers may be processed in different operations as taught by Beffa and come up with the instant invention.

*. Conclusion*


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exmr. Michael E. Butler whose telephone number is (571) 272-6937.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey, can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*MEK*  
*12/22/06*

  
PATRICK MACKEY  
SUPERVISORY PATENT EXAMINER  
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